

Reptilia, Serpentes, Colubridae, *Tachymenis* Wiegmann, 1836: Latitudinal and altitudinal distribution extension in Chile

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ABSTRACT: Observations and pictures of two snakes, *Tachymenis peruviana* Wiegmann, 1836, and *Tachymenis chilensis* (Schlegel, 1837), were taken in the Atacama coastal desert, province of Antofagasta, Chile. Furthermore, in the collection of the Museo Nacional de Historia Natural de Santiago, we found two individuals of *T. c. chilensis* from Cachapoal and Talca provinces. These records represent a northward extension of the known range of *T. c. chilensis* along the Andean foothills of more than 180 km.

The snake genus *Tachymenis* Wiegmann, 1836, contains about seven species of slender, small to moderate-sized snakes (Uetz and Etzold 1996). In Chile, the genus is represented by two allopatric species: *Tachymenis peruviana* Wiegmann, 1836, and *Tachymenis chilensis* (Schlegel 1837). The species *T. peruviana*, locally known as 'culebra peruana', inhabits altitudes between 1,800 and 4,000 m in the Andes from central Peru and southern Bolivia to northern Chile (Ortiz 1973), while *T. chilensis*, 'culebra de cola corta', is a lowland species (0-2,000 m) widely distributed in Chile, ranging from the southern part of the Atacama Desert south to Chiloé Island; in the southern part of its range this species is also found east of the Andes in Neuquén, Argentina (Donoso-Barros 1966, Ortiz et al. 1994).

Ortiz (1973) recognized two subspecies of *T. chilensis*: the northern *T. c. coronellina* (Werner, 1898) and the southern *T. c. chilensis* (Schlegel, 1837). While *T. c. coronellina* was known to occur as far south as San

Fernando (34°35' S, 71°00' W), the northern distribution limit of *T. c. chilensis* reached north to Chillán in the Andean Precordillera (36°36' S, 72°07' W) and Reserva Nacional Los Queules in the Cordillera de la Costa (35°59' S, 72°41' W) (Ortiz 1973, Simonetti 2001), leaving a gap of roughly 1.5° (~ 200 km) separating the subspecies.



FIGURE 1. *Tachymenis peruviana* at Quebrada de la Plata, Región de Antofagasta, Chile. Photo by C. Heibl, taken on 28 October 2007.

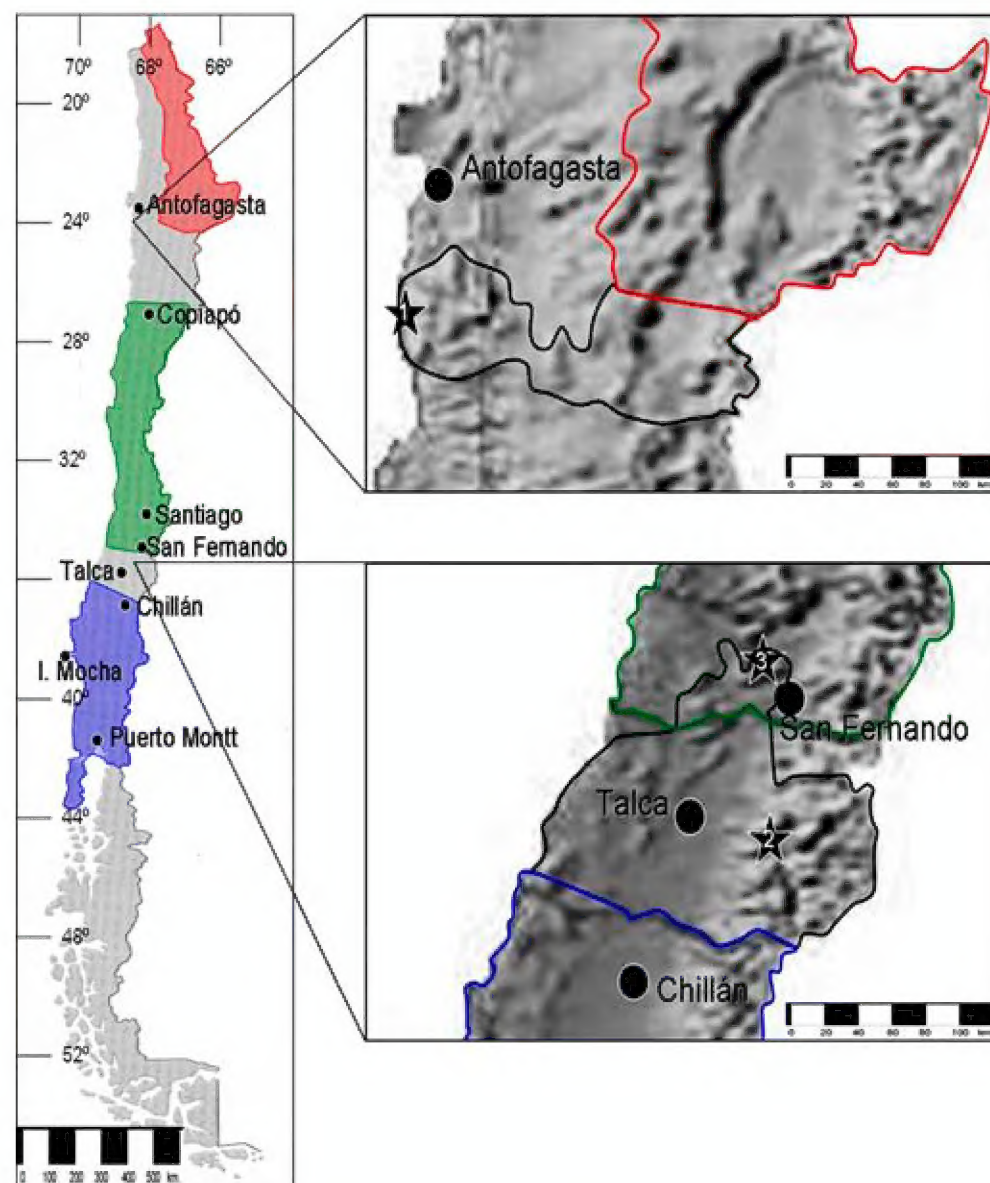


FIGURE 2. Map of Chile showing the known ranges of *Tachymenis peruviana*, (solid red) *Tachymenis chilensis coronellina* (solid green) and *Tachymenis chilensis chilensis* (solid blue), and their modification due to the data presented here (black line, in detail): *T. peruviana* at Quebrada de la Plata, II Región, Chile (1 star enclosed), *T. ch. chilensis* from Vilches Alto, VII Región, Chile (2 star enclosed), and *T. ch. chilensis* from Cachapoal, VI Región, Chile (3 star enclosed).

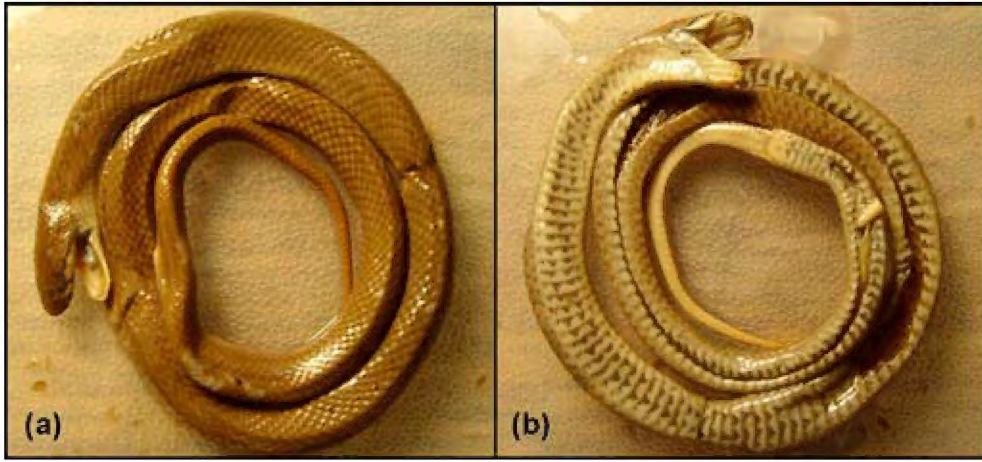


FIGURE 3. *Tachymenis chilensis chilensis* from Vilches Alto, Chile (MNHN 0982); (a) dorsal and (b) ventral view.

Here we present two recent observations that suggest extensions of the known distribution of both *Tachymenis peruviana* and *T. chilensis*.

During a botanical fieldwork in the Atacama coastal desert, one of us (CH) have found a *Tachymenis* specimen at Quebrada de la Plata, II Región, province of Antofagasta (24°42' S, 70°32' W), a Pacific-facing canyon in the rocky coast between Paposo and Antofagasta. The locality lies near the upper limit of vegetation at about 900 m above sea level and is characterized by rocky substrate and a sparse vegetation of shrubs and cacti. The photos taken on the occasion (Figure 1) made possible to identify that specimen as *T. peruviana* based on the species diagnosis given by Ortiz (1973). This situation suggests that highland species is able to occur at lower altitudes, moving across gulches that spread throughout Cordillera de la Costa on post-rain periods (Figure 2).

While working on the *Tachymenis* species collection of the Museo Nacional de Historia Natural de Santiago (MNHN), we have found two individuals of *T. c. chilensis* from localities where the species had not been sampled before. One specimen was collected from Vilches Alto, VII Región, province of Talca (35°36' S, 71°05' W) (MNHN 0982; Figure 3) and other was found between Monte Lorenzo and Toquihua, VI Región, province of Cachapoal (34°22' S, 71°08' W) (MNHN 4080, Figure 4). These records

represent a northward extension of the known range of *T. c. chilensis* along the Andean foothills of more than 180 km (Figure 2), now slightly overlapping the known range of *T. c. coronellina* (~ 30 km), and calls for a critical re-evaluation of both subspecies (Valenzuela-Dellarossa, ongoing work).

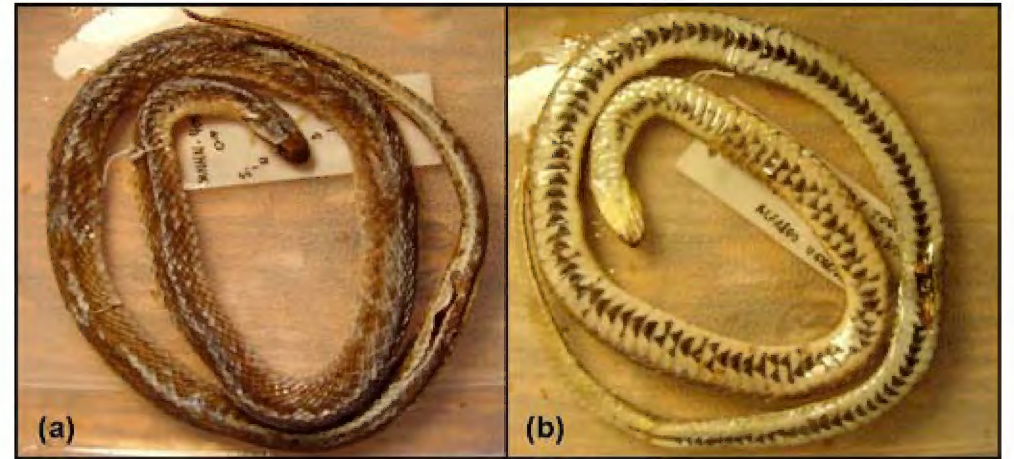


FIGURE 4. *Tachymenis chilensis chilensis* from Cachapoal, Chile (MNHN 4080); (a) dorsal and (b) ventral view.

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